HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
111 21st Avenue Southwest, Post Office Box 48343
Olympia, Washington 98504-8343 (206)753-4011

IDENTIFICATION SECTION

Field Site No.	340	**OAHP No.**		**Date Recorded**	24 Jan 1995
Site Name Historic	Waste Neutralization Facility			Revised	30 June 1997
Common					
Field Recorder	B.S. White, I.C. Lindsay				
Owner's Name	U.S. Department of Energy, Richland Operations Office				
Address	P.O. Box 550				
City/State/Zip Code	Richland, WA 99352				

Status

- [x] Survey/Inventory
- [ ] National Register
- [ ] State Register
- [ ] Determined Eligible
- [ ] Determined Not Eligible
- [ ] Other (HABS, HAER, NHL)
- [ ] Local Designation

Photography

Photography Neg. No. Roll 178A, frames 7-9
(Roll No. & Frame No.) Roll 270, frames 17-18
View of All exterior facades
Date 24 January 1995 and 23 June 1997

Photo at right: Roll 270, frame 17
View of west and north facades

Classification	[ ] District	[ ] Site	[x] Building	[ ] Structure	[ ] Object	
District Status	[x] NR	[ ] SR	[ ] LR	[ ] INV		
Contributing	[x]	**Non-Contributing**	[ ]			

District/Thematic Nomination Name Hanford Site Manhattan Project and Cold War Era Historic District

LOCATION SECTION

Address	Building 340, 300 Area						
City/Town/County/Zip Code	Richland/Benton County/99352						
Twp 10 N	**Range** 28 E	**Section** 11	**1/4 Section** NW	**1/4 1/4 Sec**			
Tax No./Parcel No.				**Acreage**			
Quadrangle or map name	Richland, Washington Quad. - 7.5 min series 1986						
UTM References Zone	11	**Easting**	324460	**Northing**	5137860		
Plat/Block/Lot			325310		5137820		
Supplemental Map(s)			325550		5136690		
			324440		5136720		

Description Section

Materials & Features/Structural Types

Building Type	Industry
Plan	Modified Rectangular
Structural System	Steel Frame
No. of Stories	One

Roof Type

- [x] Gable
- [ ] Flat
- [ ] Monitor
- [ ] Gambrel
- [x] Shed
- [ ] Hip
- [ ] Pyramidal
- [ ] Other (specify)

Cladding (Exterior Wall Surfaces)

- [ ] Log
- [ ] Horizontal Wood Siding
  - Rustic/Drop [ ]
  - Clapboard [ ]
- [ ] Wood Shingle
- [ ] Board and Batten
- [ ] Vertical Board
- [ ] Asbestos/Asphalt (transite)
- [ ] Brick
- [ ] Stone
- [x] Stucco
- [ ] Terra Cotta
- [ ] Concrete
- [ ] Vinyl/Aluminum Siding
- [x] Metal (specify) Corrugated steel panels
- [ ] Other (specify)

Roof Material

- [ ] Wood Shingle
- [ ] Wood Shake
- [ ] Composition
- [ ] Slate
- [ ] Tar/Built-up
- [ ] Tile
- [x] Metal (specify) Corrugated steel panels
- [ ] Other (specify)
- [ ] Not visible

Foundation

- [ ] Log
- [ ] Post & Pier
- [ ] Stone
- [ ] Brick
- [ ] Not visible
- Concrete
  - [ ] Block
  - [x] Poured
  - [ ] Other (specify)

Integrity (Include detailed description in **Description of Physical Appearance**)

	Intact	Slight	Moderate	Extensive
Changes to plan				x
Changes to windows	x			
Changes to original cladding				x
Changes to interior	x			
Other (specify)				

High Styles/Forms (Check one or more of the following)

- [ ] Greek Revival
- [ ] Gothic Revival
- [ ] Italianate
- [ ] Second Empire
- [ ] Romanesque Revival
- [ ] Stick Style
- [ ] Queen Anne
- [ ] Shingle Style
- [ ] Colonial Revival
- [ ] Beaux Arts/Neoclassical
- [ ] Chicago/Commercial Style
- [ ] American Foursquare
- [ ] Mission Revival
- [ ] Spanish Colonial Revival/Mediterranean
- [ ] Tudor Revival
- [ ] Craftsman/Arts & Crafts
- [ ] Bungalow
- [ ] Prairie Style
- [ ] Art Deco/Art Moderne
- [ ] Rustic Style
- [ ] International Style
- [ ] Northwest Style
- [ ] Commercial Vernacular
- [ ] Residential Vernacular (see below)
- [x] Other (specify) Industrial Vernacular

Vernacular House Types

- [ ] Gable Front
- [ ] Gable Front and Wing
- [ ] Side Gable
- [ ] Cross Gable
- [ ] Pyramidal/Hipped
- [ ] Other (specify)

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

[ ] Agriculture	[ ] Conservation	[ ] Politics/Government/Law
[ ] Architecture/Landscape Architecture	[ ] Education	[ ] Religion
[ ] Arts	[ ] Entertainment/Recreation	[ ] Science & Engineering
[ ] Commerce	[ ] Ethnic Heritage (specify) _____	[ ] Social Movements/Organizations
[ ] Communications	[ ] Health/Medicine	[ ] Transportation
[ ] Community Planning/Development	[ ] Manufacturing/Industry	[x] Other (specify) Cold War Era
	[ ] Military	[x] **Study Unit Sub-Theme(s)** Waste Treatment (Liquid)

Statement of Significance

Date of Construction 1953 Architect/Engineer/Builder Additions built by Vitro Engineering Corporation

[x] In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

[x] In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

Between 1951-1953, the 300 Area underwent a very large defense production expansion. As part of this Cold War expansion, the 340 Building was constructed along with the Radioactive Liquid Waste System, 307 Basins, and the Retention Process Sewer piping system, to attempt to deal with radioactive waste from several new laboratories in a controlled manner. Building 340 contained sampling rooms, wells, and tanks, as well as agitators, valves, and transfer pumps which were built to receive and sample liquid wastes from several 300 Area laboratories. Tanks were fed by Radioactive Liquid Waste System pipes buried about 20 feet below ground that brought wastes from the 308, 309, 325, 326, 327, and 329 Buildings and other buildings as was needed. Wastes determined non-radioactive were sent to the 307 Basins, while radioactive wastes were stored in the 340 tanks and later trucked to the 200 Areas for burial. The 340 Building has received and serviced some of the highest level radioactive waste generated in the 300 Area. The original portion of the 340 facility consisted of an open-air, subsurface concrete vault containing the waste tanks and an above ground, corrugated Transite control room. Around 1959, a pre-engineered steel addition was built to provide a garage and unloading facility for the 5000 gallon tanker trucks used to transport wastes from the 313 and 333 Buildings to the 340 facility. As the rate of fuel manufacture slowed in the 313 and 333 Buildings in the early 1960s, the decreasing volume of waste no longer warranted the use of the large tanker trucks. As a result, the addition was converted to use as a decontamination area, and the plumbing leading to the underground waste tanks was capped at both ends. Another addition was built around 1962 to house change rooms and equipment loading and storage area. Throughout the building's history, technological upgrades have been made to the monitoring and sampling equipment, valve boxes, and other instrumentation. Currently, the 340 Building continues its mission of storing liquid waste generated in the 300 Area. Surrounding buildings supporting the facility include the 340-A, 340-B, and 3718-F Buildings. The 340 Building played an important role in the initial characterization and treatment of liquid waste from 300 Area laboratories and facilities. It is therefore the conclusion of the U.S. Department of Energy that Building 340 is eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Era District.

Description of Physical Appearance

The original 340 Building consisted of an open-air subsurface concrete vault and Transite control room with a total area of 40 feet by 42.5 feet. The vault alone measures 37.8 feet by 25.6 feet by 25 feet deep and contains two 15,000 gallon stainless steel tanks. A concrete cover was added to the vault in the late 1950s due to concerns over background radiation from the exposed tanks. In 1980 new charcoal filters, HEPA filters, exhaust fans, and improved instrumentation and pumps were added at the east end of the vault to filter air from inside and around the tanks. The control room has a shed roof and contains an operating gallery with a computer-automated monitoring system. The double door to the operating gallery is on the north wall. The original sample room at the south end of the building now serves as a mechanical equipment room, though the original sample wells and piping are still present. A compressor room containing air compression equipment is also on the south end of the control room, and access to both of these small rooms is through a door on the south end of the building. The original Transite siding on the control room was covered over with stucco in the late 1980s for improved insulation. Around 1959, a steel panel addition measuring 40 feet by 42 feet by 23 feet high was added to the west end of the 340 facility and offset slightly to the south, doubling the size of the facility. The gabled roof of the addition runs east-west. A single door is located on the north wall providing access to a large decontamination area with bare concrete floors. Around 1962, another steel addition of identical size was built against the west wall of the previous addition. The west elevation of the addition has a bay door for vehicle entry as well a single pedestrian door. On the south wall of the addition, there are a set of double windows with metal frames. The interior of the building consists largely of open storage with a change room/office in the south wall. The floors are unfinished concrete.

Major Bibliographic References

Drawings H-3-9387 and H-3-34182

Gerber, M.S. 1993. *Multiple Missions: The 300 Area in Hanford Site History* . Westinghouse Hanford Company, Richland, Washinton.

Gerber, M.S. 1992. *Past Practices Technical Characterization Study - 300 Area - Hanford Site* . Westinghouse Hanford Company, Richland, Washington.

Roohr, David (Fluor Daniel Hanford Company employee). 27 June 1997. Personal communication.

Westinghouse Hanford Company. *300 Area Building Catalog* . 1993. Richland, Washington.

Westinghouse Hanford Company. *Condition Assessment Survey Narrative, 340 Building* . 1993. Richland, Washington.